

EGF-related growth factors transforming growth factor-<SYM97> (TGF-<SYM97>) and vaccinia virus growth factor (VGF), which stimulate cellular proliferation via binding to the EGF receptor, were studied for their functional and physicochemical effects on IFN-<SYM103> production. In contrast to the positive signal on purified murine EGF and recombinant human EGF (both a 1 nM), neither synthetic TGF. alpha. nor recombinant VGF were capable of restoring competence for IFN-<SYM103> production by Th cell-depleted spleen cell cultures. TGF-<SYM97> and VGF, in molar excess, also failed to block the helper signal of EGF for IFN-<SYM103> production. Thus TGF-<SYM97> and VGF failed to functionally compete for the EGF receptor in the murine spleen cell system. Both TGF. alpha. and VGF stimulated murine 3T3 cell proliferation at concentrations similar to those of EGF, and thus their failure was not due to a general lack of biologic activity. Binding studies with 125I-EGF suggest that the EGF receptor on murine lymphocytes is not constitutively expressed, but inducible by the T cell mitogen staphylococcal enterotoxin A. TGF-<SYM97> did not compete with 125I-EGF for the induced receptor. The data suggest that lymphocytes express a novel inducible EGF receptor that differs from that expressed on cells such as 3T3 fibroblasts.

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(FILE 'HOME' ENTERED AT 16:58:22 ON 29 JUL 2005)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 16:59:23 ON 29 JUL 2005

L1 14236 S TGF ALPHA
L2 1060998 S IMMUNIZ? OR VACCINE OR FUSION OR P64K
L3 354 S L1 AND L2
L4 183 DUP REM L3 (171 DUPLICATES REMOVED)
L5 189020 S ADJUVANT
L6 6 S L3 AND L5
L7 3 DUP REM L6 (3 DUPLICATES REMOVED)
L8 981923 S FREUNDS OR ALUMINUM OR ALUMINIUM
L9 1 S L3 AND L8
L10 5967208 S IMMUN?
L11 80545 S L5 AND L10
L12 13 S L1 AND L11
L13 7 DUP REM L12 (6 DUPLICATES REMOVED)
L14 661951 S FUSION OR CONJUGATE
L15 334 S L3 AND L14
L16 493925 S CARRIER
L17 2 S L15 AND L16
L18 6 S L1 AND L5 AND L14
L19 3 DUP REM L18 (3 DUPLICATES REMOVED)
L20 134 S P64K
L21 1 S L1 AND L20
L22 54 S L16 AND L20
L23 19 DUP REM L22 (35 DUPLICATES REMOVED)
L24 313989 S VACCINE
L25 10 S L1 AND L24
L26 7 DUP REM L25 (3 DUPLICATES REMOVED)
L27 39 S L7 OR L9 OR L13 OR L17 OR L18 OR L19 OR L21 OR L23 OR L26
L28 36 DUP REM L27 (3 DUPLICATES REMOVED)